

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOSUF M. TARAKI, DALE A. TRSAR,
TYRONE J. MORITZ, RICHARD H. SHEPHERD,
and MARK H. PETERSEN

Appeal No. 1999-2591
Application No. 08/628,995

ON BRIEF

Before KRASS, RUGGIERO, and DIXON, Administrative Patent Judges.
KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-21, constituting all of the pending claims.

The invention is directed to a mouse control for use in scrolling and controlling a display.

Representative independent claim 1 is reproduced as follows:

1. Display control apparatus comprising:

a display screen,

a mouse having an X-Y motion sensor and control buttons, and

a processor coupled to the display screen and to the mouse and operable under stored program control for controlling the display screen to display thereon indicia including a first indicium which is a cursor associated with the mouse,

said processor including means cooperating with the mouse to define first and second operational modes for the mouse wherein in the first mode the processor is responsive to movements of the mouse detected by the X-Y motion sensor for effecting corresponding movements of the cursor anywhere on the screen and wherein in the second mode the processor is responsive to [either of oppositely directed movements] any movement of the mouse detected by the X-Y motion sensor in either of two opposite directions while the cursor is on a second indicium to control a condition of the second indicium without affecting the location on the screen of either the cursor or the second indicium.

The examiner relies on the following references:

Barker et al. (Barker)	4,698,624	Oct. 06, 1987
Mandt et al. (Mandt)	5,039,937	Aug. 13, 1991

Robert Cowart, "Mastering Windows 3.1", [Windows] 1993, p. 178.

Claims 1-4 stand rejected under 35 U.S.C. 102(b) as anticipated by Barker.

Claims 5-21 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner provides Barker and Windows with

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regard to claims 5-15 and 19-21, adding Mandt to the combination with regard to claims 16-18.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

With regard to independent claim 1, the examiner contends that Barker teaches a display control apparatus comprising a display screen 4, a mouse having x-y motion sensor and control buttons, referring to column 3, lines 35-68. The examiner also contends that a processor in Barker would be "inherent" in the control of the display and appellants do not dispute this.

The examiner defines the claimed "first operational mode" as being Barker's cursor moving anywhere on screen 2 in response to movement of the mouse until the cursor is placed on "Describe" on the command bar, for example. It is the examiner's position that once the cursor is placed on a "second indicium," including handle 14, scale 12 and value 18, and both the mouse cursor 16 and the handle 14 reach an end of scale 12, at this point, a "second operation mode" begins. Thus, the vertical movement of the mouse controls scrolling of scale 12, i.e., changing the condition of the second indicium, but the mouse cursor 16 does

not move in response to further movement of the mouse.

Appellants appear to agree with the examiner that Barker discloses a "first operational mode" similar to appellants in that movement of the mouse effects commensurate movement of the cursor on the screen and that this movement corresponds to operation of the mouse when the system is not in scroll mode. However, it is appellants' position that the claimed "second mode" corresponds to the scroll mode and the claim requires that "when the cursor is on the frame icon 41 (the second indicium) in the scroll mode, any sensed movement of the mouse in **either** of two opposite directions will not affect the location on the screen of the cursor and will not affect the location of [sic, on?] the screen of the icon" [Principal brief-page 13]. Appellants further state that the claim recitation of "responsive to **any** movement of the mouse detected by the X-Y motion sensor" "requires the scrolling function to occur in response to a sensed mouse movement in the first of the two opposite directions **and** in response to a sensed mouse movement in the second of the two opposite directions" [Principal brief-page 13].

Both appellants and the examiner are in agreement as to how the Barker device functions. Clearly, when setting the line size function, Barker's pointer moves on the screen in correspondence

to the sensed movement of the mouse until the extent of the ruler is reached. As appellants describe [Principal brief-page 14], it is only after that point, and in response to further mouse movement in the same direction that scrolling will occur. So far, this is in accordance with the language of claim 1 which requires, in a second mode, that the processor be responsive to any detected movement of the mouse in one direction while the cursor is on a second indicium without affecting the location on the screen or either the cursor or the second indicium.

The problem, and the nub of appellants' argument, is that claim 1 not only requires this operation in one direction, it also requires the operation in an opposite direction, i.e., "in either of two opposite directions." It is appellants' contention that although Barker teaches downward scrolling and no movement of the cursor when the extent of the ruler is reached, movement of the mouse in the opposite direction, i.e., upwards, in Figure 4 of Barker, "will cause the pointer to move accordingly on the screen without a scrolling functionality" [Principal brief-page 14].

We agree with the examiner. While we fully understand what appellants are saying and we fully understand the differences between the instant *disclosed* invention and what is disclosed by

Barker, we think appellants are reading the subject matter of instant claim 1 a little too narrowly.

It is true that, in Barker, movement of the cursor in an opposite direction, i.e., upward, after reaching the extent of the ruler by moving downward, will cause the cursor to move accordingly. However, the cursor will move upward only until the extent of the ruler is again reached in the opposite direction, at which point the cursor will, again, not move, while scrolling in the opposite direction occurs. We find nothing in instant claim 1 that precludes some intermediate movement of the cursor so long as the processor is responsive to "any" movement (in Barker, movement of the mouse upward when the ruler extent is reached at the top and movement of the mouse downward when the ruler extent is reached at the bottom constitute "any" movement of the mouse) of the mouse in "either of two opposite directions" (the two extents of the ruler in Barker are clearly in "two opposite directions"). At these two extremes in Barker, the location on the screen of neither the cursor nor the second indicium is affected, as claimed. Thus, Barker meets the instant claim language.

Accordingly, we hold that Barker does anticipate claim 1 under 35 U.S.C. 102(b).

With regard to claims 2 and 3, clearly the scale, having numbers and line measures thereon, in Figures 2-4 of Barker constitute a screen icon having graphical images, which are characters, displayed therein. Accordingly, we will also sustain the rejection of claims 2 and 3 under 35 U.S.C. 102(b).

We turn, now to instant claim 4. This claim requires, inter alia, that the icon represents a "switch" and that the switch is assigned a list of images representing different switch options. The examiner contends that Figures 1 and 2 of Barker show that the icon therein represents a "switch" and that each switch is assigned a list of graphical images. We find no "switch" in Barker and the examiner has not specifically pointed out what it is, in Barker, on which the examiner relies for such a teaching. The "switch," as used in the instant claims, refers to the wheels shown in instant Figure 5, wherein a list of graphical images, i.e., the set of integral numbers, and the set of fractional numbers, is assigned to each switch. We find nothing like this in Barker.

Accordingly, we will not sustain the rejection of claim 4 under 35 U.S.C. 102(b).

The rejection of claims 5-15 and 19-21 under 35 U.S.C. 103 is based on Barker, taken together with Windows.

We will not sustain the rejection of claim 5 under 35 U.S.C. 103 because this claim depends from claim 4, requiring the "switch" discussed supra. Windows does not provide for the deficiency of Barker in this regard, in addition to our doubt that Windows even discloses the "continuous loop" required by claim 5.

With regard to claim 6¹, this claim even further limits the claimed subject matter to the processor being responsive to "substantially vertical movements of the mouse...for scrolling through the list of character groups assigned to one of the switches" and responsive to "substantially horizontal movements of the mouse...for scrolling through the list of character groups assigned to the other switch." Besides a lack of teaching by either of Barker or Windows of the claimed "switches," there is clearly no suggestion in either of the references of the claimed vertical and horizontal movements of the mouse to control one or the other of the switches. This refers to Figure 5 of the instant application where movement in one direction controls scrolling of the integral number switch and movement in the other

¹Although appellants refer to this claim, at page 17 of the principal brief, as depending from claim 5, claim 6 actually depends from claim 2.

direction controls scrolling of the fractional number switch. We find nothing, whatsoever, in any of the cited references which remotely resembles or suggests such subject matter. The examiner states that this would have been obvious because "horizontal movement of mouse would allow scrolling in a way similar to the vertical movements of mouse. It would be a matter of desire [sic. design?] choice to either move the mouse vertically or horizontally because that does not change the diagnostics of the device" [answer-page 5]. The examiner misses the point. It is not a matter of choosing a particular direction in which to move the mouse. Rather, in the instant claimed invention, movement of the mouse in one direction controls one switch (an integral number switch) while movement of the mouse in the orthogonal direction controls another switch (a fractional number switch). The applied references are completely devoid of any suggestion anent this claimed subject matter. We will not sustain the rejection of claim 6 under 35 U.S.C. 103.

With regard to independent claims 7 and 13, and claims 8-12 and 14-18, dependent thereon, we also will not sustain the rejection of these claims under 35 U.S.C. 103. Similar to claim 4, claim 7 recites "switches" being represented by icons, with each switch having assigned thereto a list of indicia

respectively representing different switch positions. In the instant disclosure, this refers to the separate control of the integer numbers and fractional numbers, as depicted in instant Figure 5. It is for this reason that we will not sustain the rejection of claim 7 under 35 U.S.C. 103. We are not convinced by appellants' argument, at page 18 of the principal brief, regarding the depression of a mouse button "for more than a predetermined time while the cursor is on the icon" because the examiner makes a good point, at page 6 of the answer, that the difference between a "click" command and a "scroll" command, using a mouse, was known and that force must be applied to the mouse control while the cursor is placed on an arrow a "predetermined time longer than a 'click' to indicate scrolling is desired" [answer-page 6]. The claimed limitation of the processor responsive to depression of the mouse control button "for more than a predetermined time while the cursor is on the icon" does not appear to preclude any and all amounts of time a user may depress a mouse control button. But, in any event, we will not sustain the rejection of claim 7 under 35 U.S.C. 103 because, in our view, the claimed "switches" are nowhere suggested by the applied references.

Similarly, and even more so, we will not sustain the

rejection of claim 13 under 35 U.S.C. 103 because claim 13 not only claims the switches but also recites the scrolling of one switch responsive to a vertical mouse movement and the scrolling of the other switch responsive to a horizontal mouse movement, as in claim 6, supra. We find nothing in either one of Barker or Windows, or the combination thereof, that would, in any way, shape or form, suggest this limitation.

Accordingly, we will not sustain the rejection of claims 7-18 under 35 U.S.C. 103. While the rejection of claims 16-18 also relies on the Mandt reference, this reference was only used for a teaching of an oscilloscope displaying a full waveform and a selected part of the waveform and does not provide for the deficiencies of Barker and/or Windows.

Finally, we turn to the independent claims 19, 20 and 21.

The examiner explains that the rejection of these claims is as applied to claims 5-13. The only differences we see between these claims and claim 1, for example, is in the recitation of the second indicium having a "predetermined area;" the recitation of the processor "executing a computer routine" and the controlling of "a condition" of the second indicium. These claims recite nothing about the switches. For reasons similar to our holding of anticipation of claim 1 over Barker, supra, we

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find nothing in claims 19-21 not taught or suggested by Barker and the cumulative Windows reference.

Appellants' response to the examiner's rejection of claims 19-21, at page 20 of the principal reference, is merely to state that these claims "are more detailed recitations" of features already discussed. They contend that the claims "specify the display screen features of predetermined area for the switch icon which is displayed while the cursor can be moved anywhere on the screen when the scroll mode is not in effect." However, it is clear that the icons in Barker have a "predetermined area" and, as interpreted with regard to claim 1, supra, Barker does disclose the movement of the cursor anywhere on the screen when the scroll mode is not in effect. Notwithstanding appellants' argument regarding a "switch icon," we find nothing in any one of the claims 19-21 regarding a "switch" of any kind.

Accordingly, we are unpersuaded by appellants' argument anent claims 19-21 and we will sustain the rejection of these claims under 35 U.S.C. 103.

CONCLUSION

We have sustained the rejection of claims 1-3 under 35 U.S.C. 102(b) and the rejection of claims 19-21 under

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35 U.S.C. 103. We have not sustained the rejection of claim 4 under 35 U.S.C. 102(b) and we have not sustained the rejection of claims 5-18 under 35 U.S.C. 103.

Accordingly, the examiner's decision is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

ERROL A. KRASS)	
Administrative Patent Judge)	
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JOSEPH F. RUGGIERO)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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JOSEPH L. DIXON)	
Administrative Patent Judge)	

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EK/RWK

MCDERMOTT WILL & EMERY
600 13 STREET N.W.
WASHINGTON, DC 20005